Montana
Office of Public Instruction
Denise Juneau, State Superintendent
opi.mt.gov

Content Standards Informer

Curriculum and Instruction Unit

September 2011

Curriculum Development Guide Available

The Curriculum and Instruction Unit of the Office of Public Instruction (OPI) Accreditation Division would like to share our on-line Montana Guide to Model Curriculum Development. This Web page is intended to provide practical information and resources to assist in the development of curricula aligned with the content and performance standards.

Advice and expertise from curriculum directors, school administrators, teachers and post-secondary faculty have informed the creation of this resource. This guide also reflects the long history of curriculum guides and resources created through the OPI and required by the Board of Public Education.

This guide is designed to provide resources and guidance to schools, districts, curriculum consortia and others at multiple access points and stages of curriculum development. It allows educators to find pertinent information for a wide range of topics that inform the curriculum development process--from the legal foundations in Montana law and rules to classroom level instructional strategies and assessment. This is a guide. It is not exhaustive in its depth or in the number of resources, but it is specifically designed for Montana educators to look with intention and clear guidance at improving the process of curriculum development in Montana schools. This guide is also intended to serve as a clearinghouse to the OPI and national resources.

We need your assistance to continue to improve and grow this resource. Your comments and suggestions are essential to making this guide responsive to your needs. As you review the sections of the guide, please take a few moments to enter comments and suggestions in the "Comments" tool. Your entries will be anonymous, but if you choose to provide contact information, the OPI curriculum specialists will be glad to respond to your remarks.

Please visit http://www.opi.mt.gov/curriculum/curriculum-development-guide to review and comment.

Common Core Montana

The OPI is actively working on the professional development roll out for the Proposed 2011 Montana adapted Common Core State Standards. The Montana Board of Public Education is scheduled to vote on the adoption of the Mathematics and English Language Arts standards in November 2011. Resources about the project, the alignment to current

standards, and other resources are available on the OPI Web page at: http://www.opi.mt.gov/Curriculum/Index.html?gpm=1_7. Look for future announcements of Web-based presentations delivered directly to your computer, face-to-face professional development opportunities and new resources to assist with local implementation.

Science, Technology, Engineering and Mathematics (STEM) Forum

Registration is now officially open for the fall Montana STEM Forum hosted by the Montana Office of Public Instruction. This year's theme, "A Vision of STEM in the State of Montana," will focus on what STEM looks like across the state of Montana. STEM partnerships will be spotlighted and an update on the statewide STEM initiative will be shared. Dr. Stephen Pruitt will be our featured guest speaker. Dr. Pruitt is the Vice President for Content, Research and Development at Achieve, Inc. and is leading the development of the Next Generation Science Standards (http://www.achieve.org/staff-stephen-l-pruitt-phd).

Breakout sessions will include the following:

- Classroom robotics;
- Partnerships that connect students with scientists in the field;
- The creation of outdoor classrooms; and
- The role of business and nonprofit organizations in STEM education.

Whether you are a classroom teacher, an administrator, a business or industry employee or employer, a state agency representative, or interested community member, this conference is for you. You will not want to miss the tremendous learning and collaborative opportunities at this year's STEM Forum!

The conference will be held at the Red Lion Hotel in Helena, Montana. It will begin at 8:30 a.m. on Tuesday, October 4 and will end at noon on Wednesday, October 5. There is no fee to attend this conference, and OPI renewal units will be available. Please contact Sheri Harlow by September 23, 2011, e-mail, sharlow@mt.gov, or by phone, (406)444-9864, in order to register.

A block of rooms is available at the Red Lion Hotel under OPI STEM. Please call (406) 443-2100 by September 9 in order to reserve a room at the state rate. Overflow rooms will also be available at area hotels should all of the rooms at the Red Lion be booked.

If you have questions or need further information regarding the STEM Forum please contact Kristen Crawford by e-mail, kcrawford@mt.gov, or by phone, (406)444-3557. We hope to see you in October!

English/Language Arts

Vacant, English/Language Arts Curriculum Specialist

Early Grades

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MtAEYC 2011 Annual Conference

Mark your calendars for the 2011 Montana Association for the Education of Young Children (MtAEYC) in Bozeman, Montana. The conference will take place in the Strand Union Building on the campus of Montana State University-Bozeman, October 14-15, 2011. This year's keynote is Donna Donnelly of Life Guides, Inc.

The theme for the conference this year is well-being and the title is ***"Montana: Creating a State of Well-Being."*** Rooms have been blocked at several hotels in Bozeman. Visit www.mtaeyc.org for more information. Save money by registering before October 1st.

From Eye on Education www.eyeoneducation.com

Use It or Lose It – Prior Knowledge Strategies

Launching the learning in your classroom from the prior knowledge of your students is a tenet of good teaching. Asking students to share their own experiences, hunches, and ideas about the content or concept of study and relating it to their own lives should be done at the start of a lesson -- and throughout a unit of study.

Try these activities for firing up those young minds and tapping into prior knowledge:

Image Brainstorm: Project an image on the LCD projector or Smartboard and ask students to tell you everything they can about the picture. Choose images that make sense to them and also allow you to connect to the new content and/or concepts students

will be learning. Use an image of famous artwork to launch a discussion on tone and mood in a particular poem or short story.

K-W-L Chart: Tried and true, yes, though it doesn't work with all subjects and can be an overused activity for assessing prior knowledge. Use sparingly and dynamically.

Picture Books: No matter the age, they work like magic. If there's a concept or skill you are about to introduce, find a children's book that's related in some way and that your students may be familiar with. Read it aloud and watch the bells go off.

ABC Brainstorming: On one sheet of paper students make a box for every letter of the alphabet and then (they can do it in pairs) brainstorm a word or phrase that starts with each letter. For example, if kids are about to study the history of slavery in the United States, they may write things like: "Africans" for *a*, "boat" for *b*, "chains" for *c*, etc.

Class Brainstorm Web: After writing a word or phrase in a circle (whiteboard, poster paper) have students write as many words connected to it that they can think of around it. For example, you might write "photosynthesis" in the center and kids write things like, *plants, green, sun, water*, and *light*. Use a timer with this activity to create a sense of urgency (which adds to the fun). Keep the web visible throughout upcoming lessons and refer to it as needed for student comprehension and understanding.

Professional Book Pick

Using Formative Assessment to Drive Mathematics Instruction in Grades PreK-2
Authors: Christine Oberdorf, Jennifer Taylor-Cox
ISBN: 9781596671874

The formative assessments include student work samples at varying levels. The authors

- Illustrate the distinction between a "traditional" assessment and an "enhanced" assessment.
- Describe specific differentiated activities so each student may consistently receive instruction geared to specific need.
- Provide teachers with "Questions to Assess" to determine what each child understands about the math concept.

- Show how to move students to higher-level mathematics thinking and to apply math concepts.
- Include extension activities to offer challenging work for children who have achieved skill mastery level.

Reach Out and Read: *Preparing America's Youngest Children to Succeed in School*

Reach Out and Read is an evidence-based nonprofit organization that promotes early literacy and school readiness in pediatric exam rooms nationwide by giving new books to children and advice to parents about the importance of reading aloud.

Reach Out and Read builds on the unique relationship between parents and medical providers to develop critical early reading skills in children, beginning at six months of age. The more than 3.9 million families served annually by Reach Out and Read, read together more often, and their children enter kindergarten better prepared to succeed, with larger vocabularies, stronger language skills, and a six-month developmental edge over their peers.

Follow this link to see what programs are actively taking place in your community:
http://www.reachoutandread.org/whereweare/site_list.aspx

Library-Information Literacy

Colet Bartow, Library-Information Literacy Curriculum Specialist
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New FREE Online Resources for K-12 Schools – EBSCOHost and HomeworkMT.org

How to Access the Resources

Each school has a unique login to the Montana State Library Directory (http://montanalibrarydirectory.org). The directory is a portal to all of the resources that are provided through contracts with the Montana State Library. Please use the "HELP, I forgot my password" link in the directory Edit Path to request your new login. Remember that login information can only be sent via FAX or U.S. mail. An information sheet is posted on the Montana Teacher-Librarian wiki to guide users through the MSL Directory to database access information.
http://www.opi.mt.gov/groups/mtl/wiki/66ba0/Database_Training.html

Training for the EBSCOHost and HomeworkMT will be available through webinars and on-site workshops over the course of the next year.

2011 Schedule of EBSCO and HomeworkMT Training

EBSCO Webinars (click on the link to register)

- Tuesday, September 13th 9:00 a.m.
  https://ebscotraining.webex.com/ebscotraining/k2/j.php?ED=145139382&UID=1212925722&HMAC=acfc2d5f9cd3ccf38b5de56fdbcf4584cc8eae51&RT=MiMxMQ%3D%3D&FM=1
- Wednesday, September 14th 3:00 p.m.
  https://ebscotraining.webex.com/ebscotraining/k2/j.php?ED=145139387&UID=1212926757&HMAC=5a917c731ba3026be0d6f6ad3ef1361dfc8f01f2&RT=MiMxMQ%3D%3D&FM=1

EBSCO Live, Face-To-Face Workshops

- September 24th 1:30 p.m. Fall Workshop, GranTree Inn, Bozeman
- October 7th 1:00 p.m. Bozeman Public Library
- October 11th 10:00 a.m. Parmly Public Library, Billings
- October 11th 4:00 p.m. Miles City Public Library
- October 12th 1:00 p.m. Havre-Hill Public Library
- October 13th 11:00 a.m. Butte-Silverbow Public Library
- October 14th 10:00 a.m. Flathead County Library, Kalispell

HomeworkMT Webinars

- September 8th 9:00 a.m.
  GoToMeeting_HomeworkMTSep8
- September 13th 3:00 p.m.
  GoToMeeting_HomeworkMTSep13
- September 28th 4:00 p.m.
  GoToMeeting_HomeworkMTSep28

Communication and Collaboration

SLMD Listserv – please e-mail Colet Bartow (cbartow@mt.gov) if you would like to be added to this highly informative listserv. You can also visit the Montana Teacher-Librarian wiki (http://www.opi.mt.gov/groups/mtl) for more information and resources useful to Montana schools.

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Mathematics

Jean Howard, Mathematics Curriculum Specialist
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SMARTER Balanced Assessment Consortium Releases Draft of Content Specifications for Mathematics

The Smarter Balanced Assessment Consortium (SBAC) recently released the *Content Specifications for Mathematics* and is seeking comments on this important component in the development of the next generation of assessment aligned to the Common Core State Standards. This document provides the basis for the development of the new assessments that will be used in Montana and about 30 other states. **It is important that Montana educators take time to review and provide feedback through the survey provided**.

As you prepare to examine the SBAC documents with colleagues, it will be important to carefully review all of the components, including the three appendices. The first round of feedback is **due no later than Monday, September 19**. A second, one-week feedback window is scheduled for October 10-17.

Web site links to a press release, the SBAC Content Specifications for Mathematics, the survey, and a webinar which provides further information about the documents is available at: http://www.k12.wa.us/SMARTER/Resources.aspx.

MATH DAY

FRIDAY, September 23rd, 8:45 a.m. - 3:00 p.m., University of Missoula

Mathematics activities for both students and teachers (and some combined student teacher sessions). This year the workshops will include: counting to Infinity, topology, fractals and more. For up-to-date information about Math Day, please visit:
http://www.math.umt.edu/mathcircle for registration and other details.

Free Apps

iTunes
Android

This free app is a great reference for students, parents, and teachers to easily read and understand the common core standards. This app includes Math standards K-12 and Language Arts standards K-12. Use your mobile phone for teaching and learning mathematics. You can download the application for free or try them online: http://www.math4mobile.com/.

Target Accepting Applications for K-12 Field Trip Grants Program

Over 5,000 grants of up to $700 are available to education professionals employed by K-12 schools in the United States to bring students to museums, historical sites, and cultural organizations.

Deadline: October 3, 2011
Posted: August 25, 2011

Science

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The Conceptual Framework for the New Science Education Standards is Finally Released!

Many of you saw the draft version of the Conceptual Framework last summer. Now, after going through an extensive editing process, this incredible document is finished and available to download for free. If you aren't familiar with it, *A Framework for K-12 Science Education,* was developed by a committee of experts in education and science who were appointed by the National Research Council. The framework identifies the key scientific practices, concepts and ideas that all students should learn by the time they complete high school. It is intended as a guide for those who develop science education standards, those who design curricula and assessments, and others who work in K-12 science education. More information about the development of the document can be found at the National Academies site. To download the framework for free, visit the National Academies Press site. This document will also serve as a foundational document for the writing of the *Next Generation Science Standards.*